BookletChart™

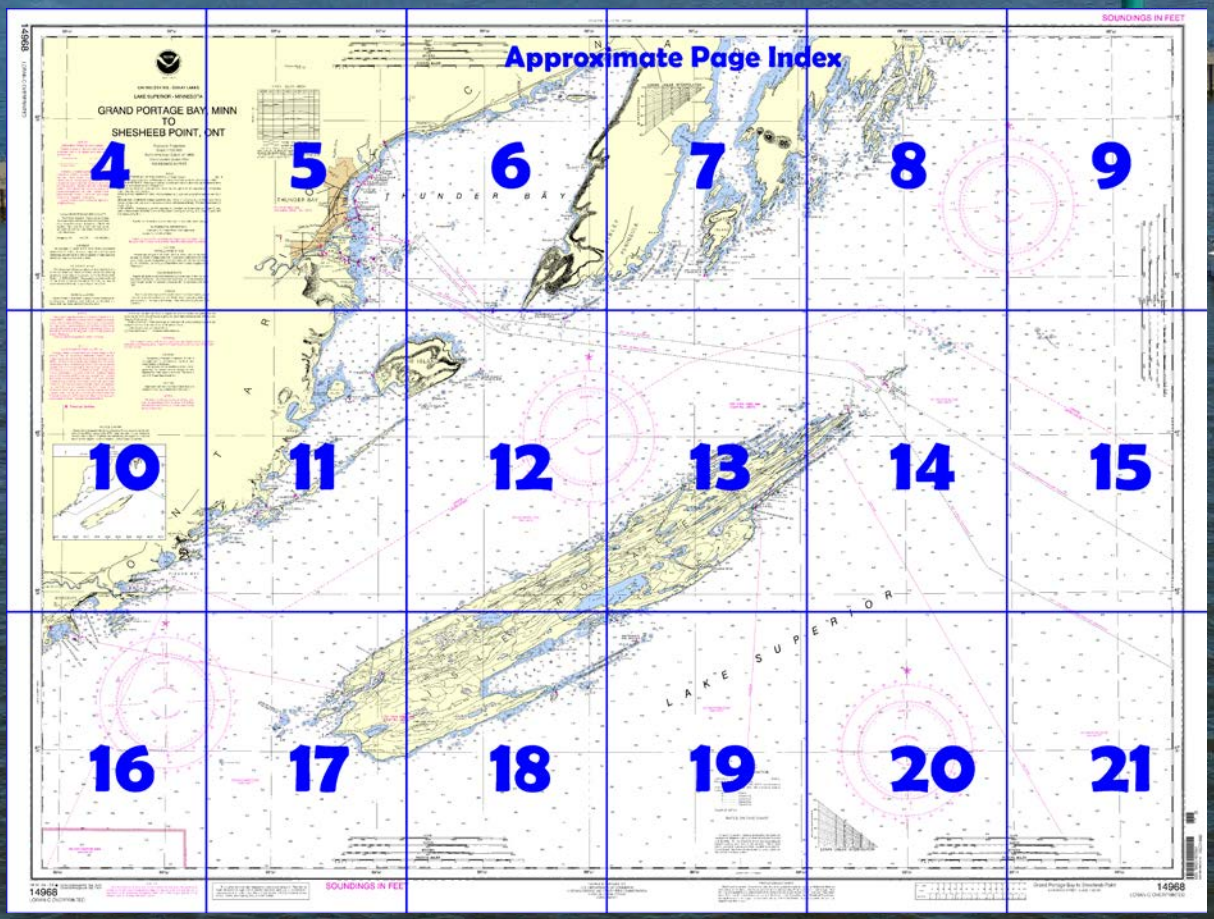
Grand Portage Bay, Minn., to Shesheeb Point, Ont.

NOAA Chart 14968

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14968.

(Selected Excerpts from Coast Pilot)
Grand Portage Bay, about 5 miles southwest of the International boundary, is about 2 Miles wide and extends 1.3 Miles into the shoreline. **Hat Point** (47°57.2'N., 89°38.3'W.), marked by a light, encloses the northeast side of the bay and separates it from Wauswaugoning Bay. **Grand Portage Island,** in the middle of the entrance to the bay, affords some protection from offshore winds. Inside Grand Portage Island, the bay has depths of 6 to 12 feet. Boats drawing 8 feet or more should not approach nearer than 0.25 mile to shore. A 6-foot shoal midway between Grand Portage Island and Hat Point renders the bay entrance northeast of the island hazardous.

Small-craft facilities.–Marinas on the north and west sides of the bay provide berths, gasoline, diesel fuel, water, electricity, sewage pump-out, and launching ramps. A small store is near the ferry dock on the northwest side of the bay. Small passenger ferries run from this dock to several harbors on Isle Royale.

Ferries.–A ferry service operates between Grand Portage and Isle Royale National Park in the summer. The schedule is available from Superintendent, Isle Royale National Park, 87 N. Ripley Street, Houghton, MI 49931.

Wauswaugoning Bay is just northeast of Grand Portage Bay, separated from it by Hat Point. The shore of the bay along Hat Point is a continuous rocky cliff rising to about 100 feet above the lake. **Mount Josephine,** at the inner end of Hat Point, rises 700 feet above the lake. The northwest side of the bay is bordered by a 500-foot bluff with a boulder beach broken by cliffs. The northeast side of the bay is low and heavily wooded.

A rocky reef, covered 5 feet, is about 0.6 mile offshore on the northwest side of Wauswaugoning Bay. **Francis Island,** small and rocky, is on a rocky ledge that extends 0.4 mile west from the east point of the bay. Aside from these hazards and the shallows at the northeast end of the bay, there are good depths and the shores are fairly deep-to. The bay has good holding ground for anchorage, but is exposed to southeast to southwest winds.

Wauswaugoning Bay is partially protected by a group of small islands that extend 2 miles southeast from the E point of the bay. **Lucille Island,** the outermost, **Susie Island,** and **Magnet Island** are the largest in the group. A dangerous detached rock is 0.3 mile southeast of the southwest point of Lucille Island. Caution is advised when navigating around and between these islands.

From Wauswaugoning Bay, the shore trends east-northeast for 5.5 miles to Pigeon Point (48°00.2'N., 89°29.8'W.). **Clark Bay,** at the inner end of Pigeon Point, is a small inlet open to east and protected on the south side by a point and two small islands. **Pigeon Point** is a rocky peninsula that extends 3.5 miles east-northeast and encloses the south side of **Pigeon Bay.** The bay, about 3.5 miles long and 1 mile wide, is bordered by high hills and bluffs which protect it from all directions but east. **Pigeon River** flows into the west end of the bay at the base of Pigeon Point.

The **International boundary** between the United States and Canada extends through Pigeon Bay and then follows the Pigeon River.

Boundary Island is a dangerous reef with several small islets near the center of Pigeon Bay. Close northwest of Boundary Island, a narrow point extends 1 mile east from shore to divide the inner part of the bay into two arms. A reef with small islets extends off the end of the point. **Acadia Rock,** covered 4 feet, is 1 mile west-southwest of Boundary Island. **Laura Grace Rock,** covered 6 feet, is 0.3 mile west of Acadia Rock. Other than these dangers, the bay has deep water. Caution is advised when anchoring, because the rocks limit the available room and the holding ground is not good.

Isle Royale is 44 miles long northeast and southwest and has a maximum width near its southwest end of 8.5 miles. **Mount Desor,** 794 feet above the lake and the highest point on the island, is 12.5 miles from the southwest end. The shores of the island have numerous indentations and many detached islets and reefs.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Cleveland	Commander 9th CG District Cleveland, OH	(216) 902-6117

Table of Selected Chart Notes

Ⓟ Pump-out facilities

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOTE B

Mariners should use caution as military craft may be operating within the area. For further information consult the U.S. Coast Guard Local Notice to Mariners.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Houghton, MI	WXK-73	162.400 MHz

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Michigan waters of Lakes Michigan, Huron, Superior, Erie and St. Clair, all waterways connected thereto, and all inland lakes are designated as a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. Commercial vessel sewage shall include graywater. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/vessel_sewage/vsdnozone.html.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.

Refer to charted regulation section numbers.

LORAN-C

GENERAL EXPLANATION

750

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
8970.....89,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 8970-Y

RATES ON THIS CHART

727

8970-X 8970-Y

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

SOURCE DIAGRAM

Most of the hydrography identified by the letter "j" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1

AUTHORITIES. Hydrography and Topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....601.1ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

14968

LORAN-C OVERPRINTED

89°40' 89°30' 89°20'

48° 30'

48° 20'

UNITED STATES - GREAT LAKES

LAKE SUPERIOR - MINNESOTA

GRAND PORTAGE BAY, MINN TO SHESHEEB POINT, ONT

Polyconic Projection
Scale 1:120,000
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET

CAUTION

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Pipeline Area *Cable Area*

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COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

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Refer to charted regulation section numbers

NOTES

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SUPPLEMENTAL INFORMATION

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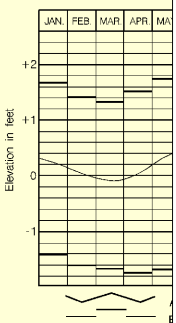
Station positions are shown thus:

(Approximate location)

Joins page 10

LAKE



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Printed at reduced scale.

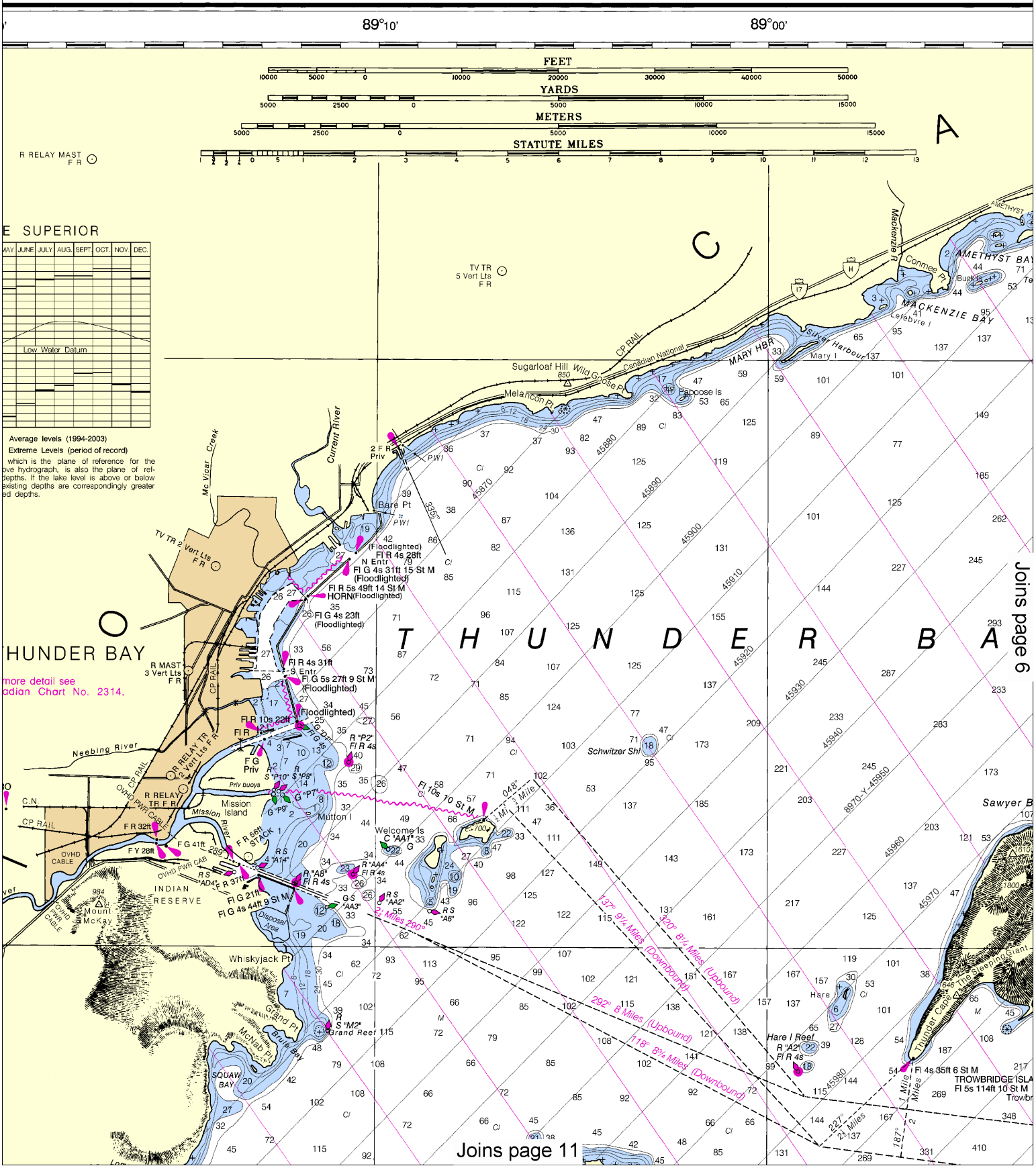
See Note on page 5.

YARDS 5000 2500 0 5000 10000 15000

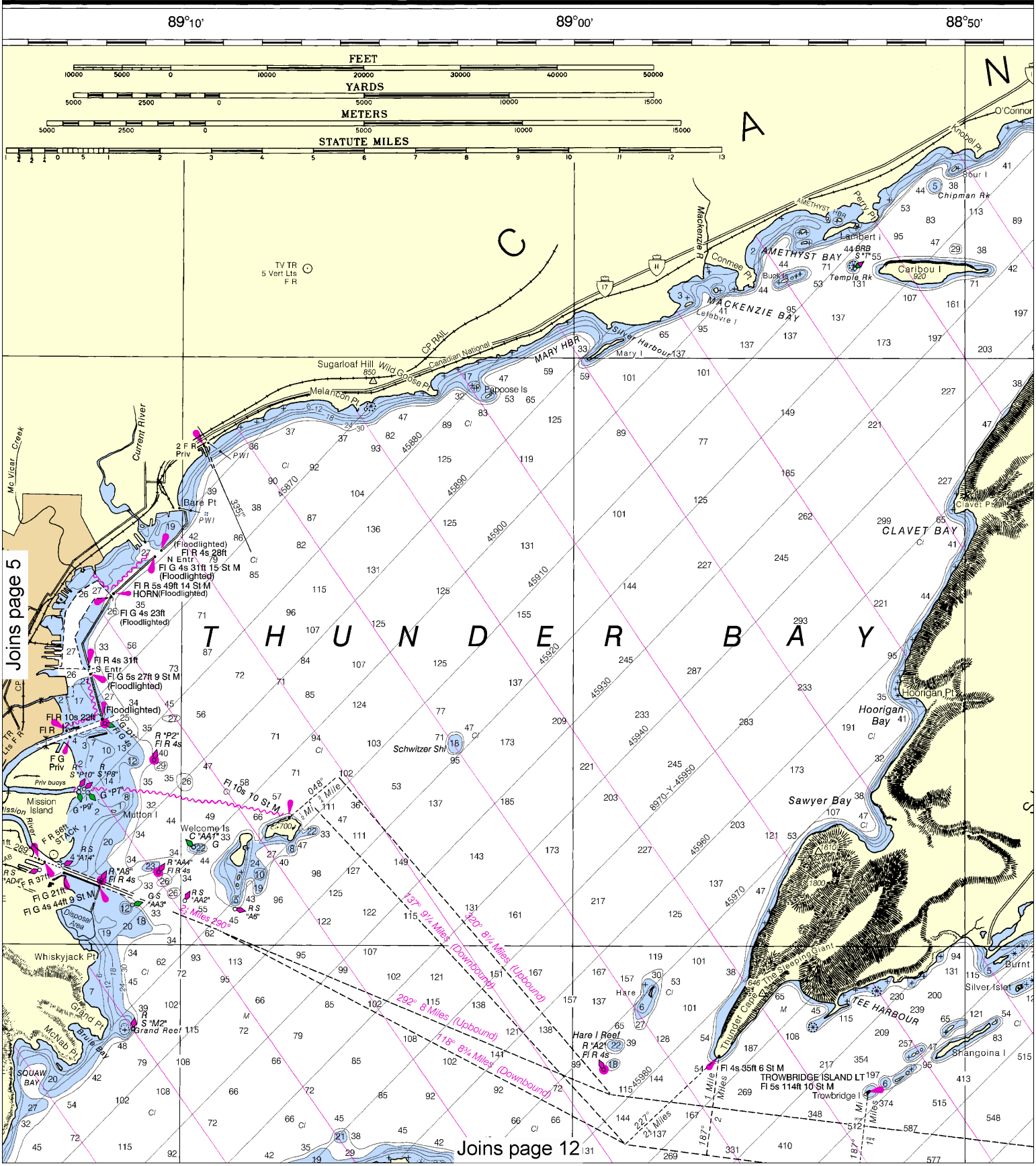
STATUTE MILES 0 1 2 3 4 5 6 7 8 9 10 11 12 13

Note: Chart grid lines are aligned with true north.

4



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:160000. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



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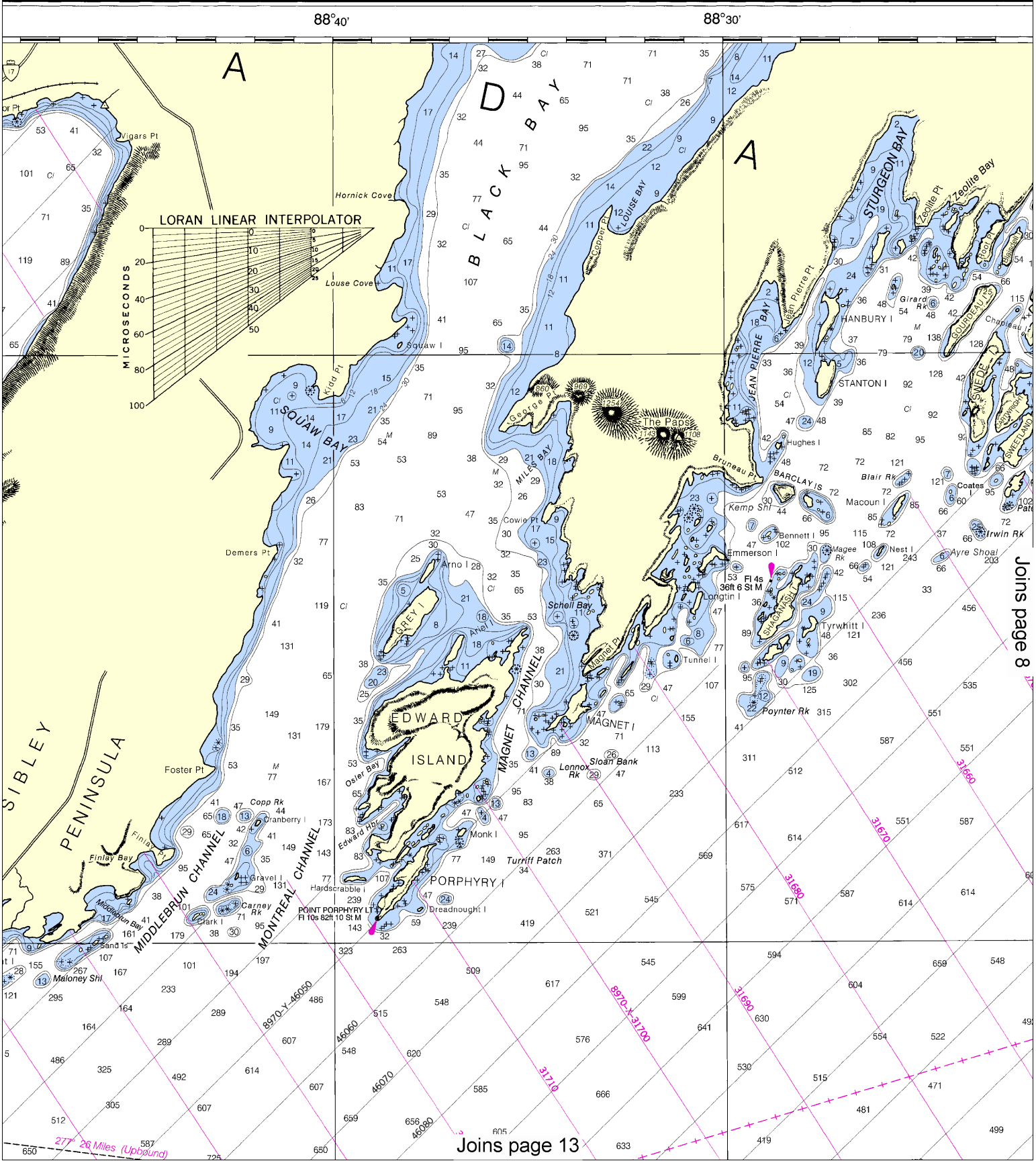
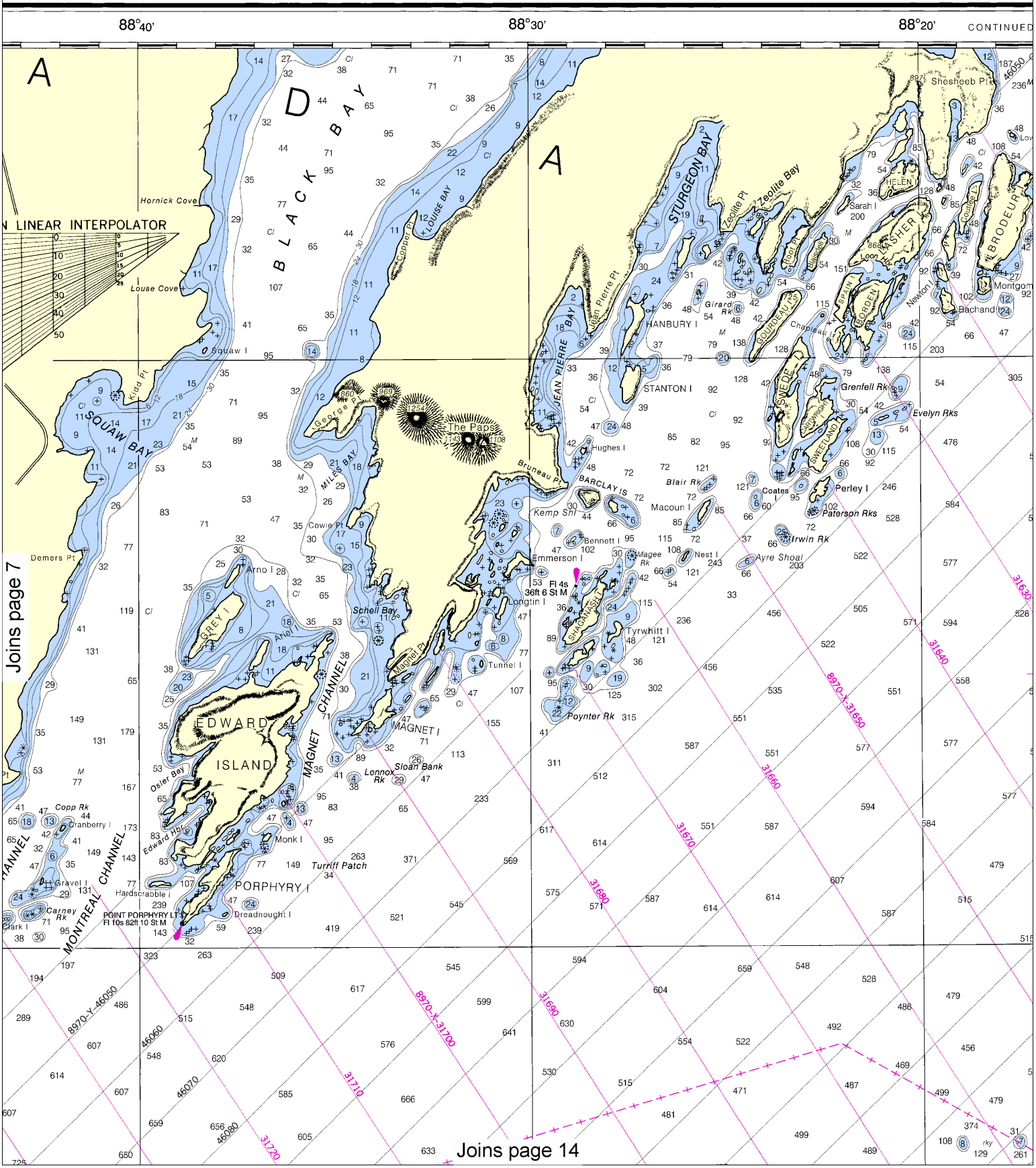
See Note on page 5.



This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4712 11/20/2012,
NGA Weekly Notice to Mariners: 4812 12/1/2012,
Canadian Coast Guard Notice to Mariners: 1012 10/26/2012.



8

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YARDS 5000 2500 0 5000 10000 15000

STATUTE MILES 1 2 3 4 5 6 7 8 9 10 11 12 13

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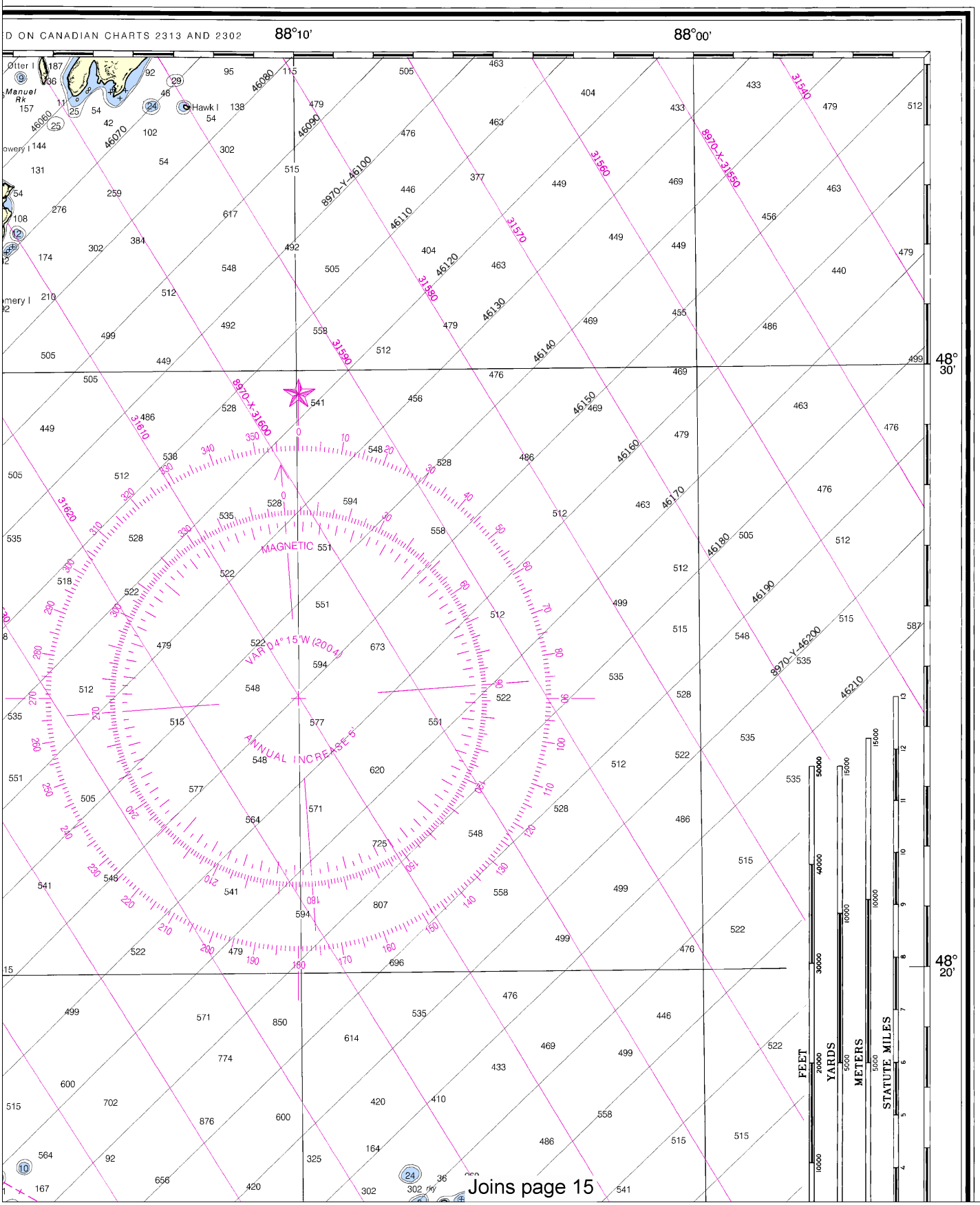
SOUNDINGS IN FEET



Joins page 15

Joins page 4

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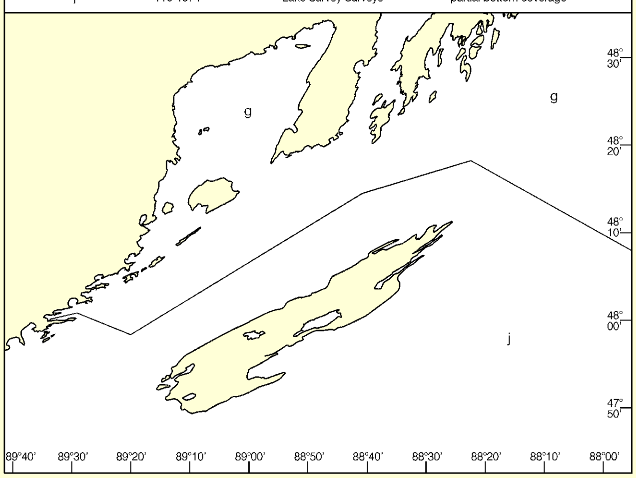
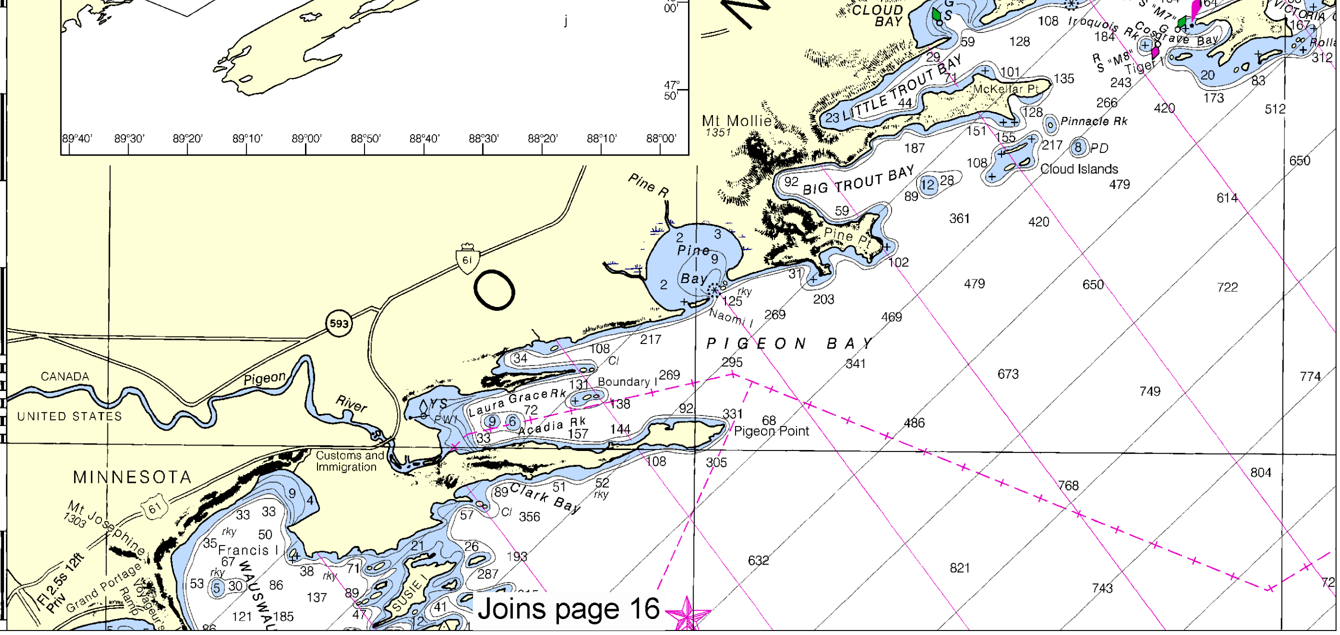
SOURCE			
g		Canadian Charts	partial bottom coverage
j	Pre-1974	Lake Survey Surveys	partial bottom coverage





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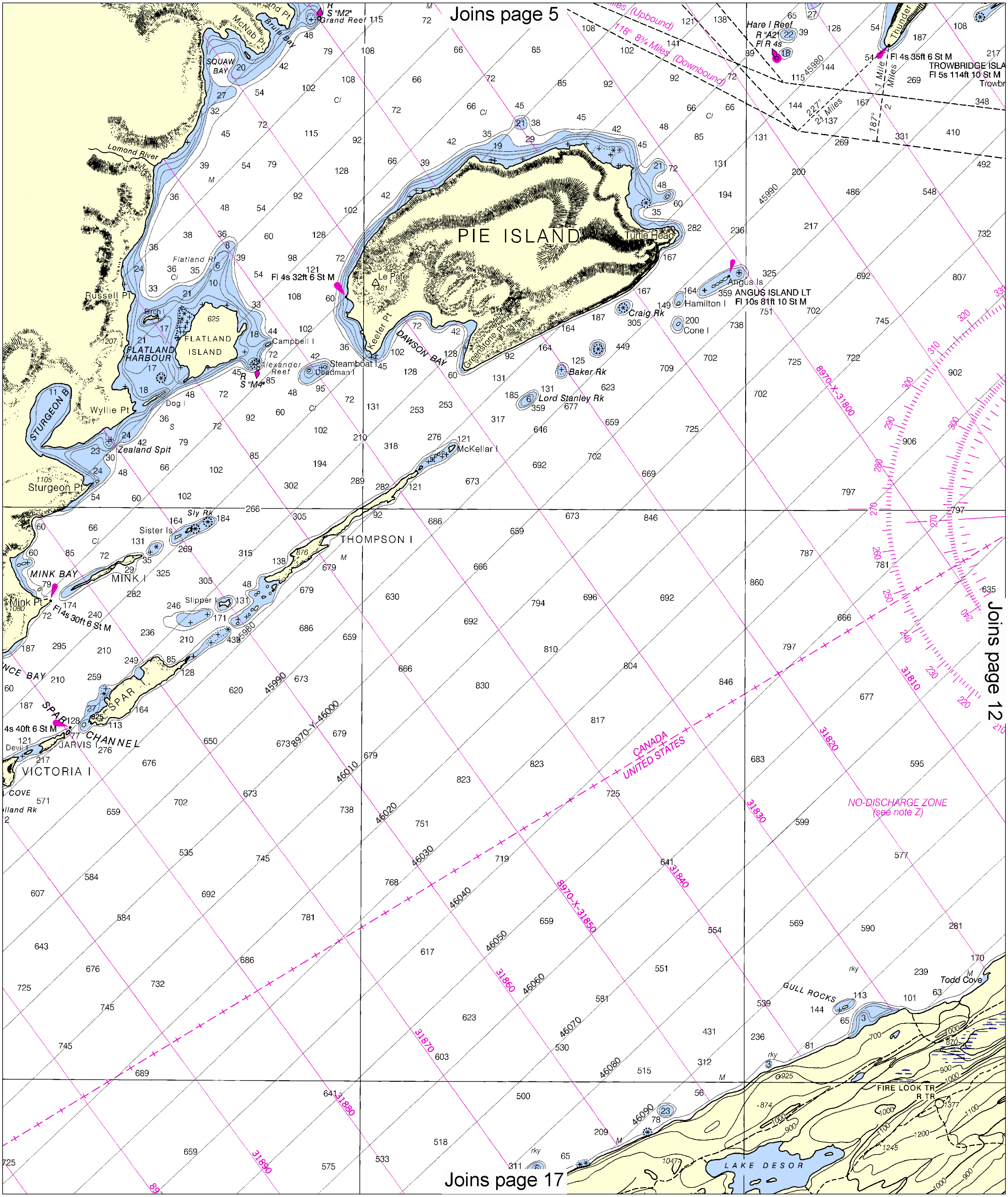
Printed at reduced scale. See Note on page 5.

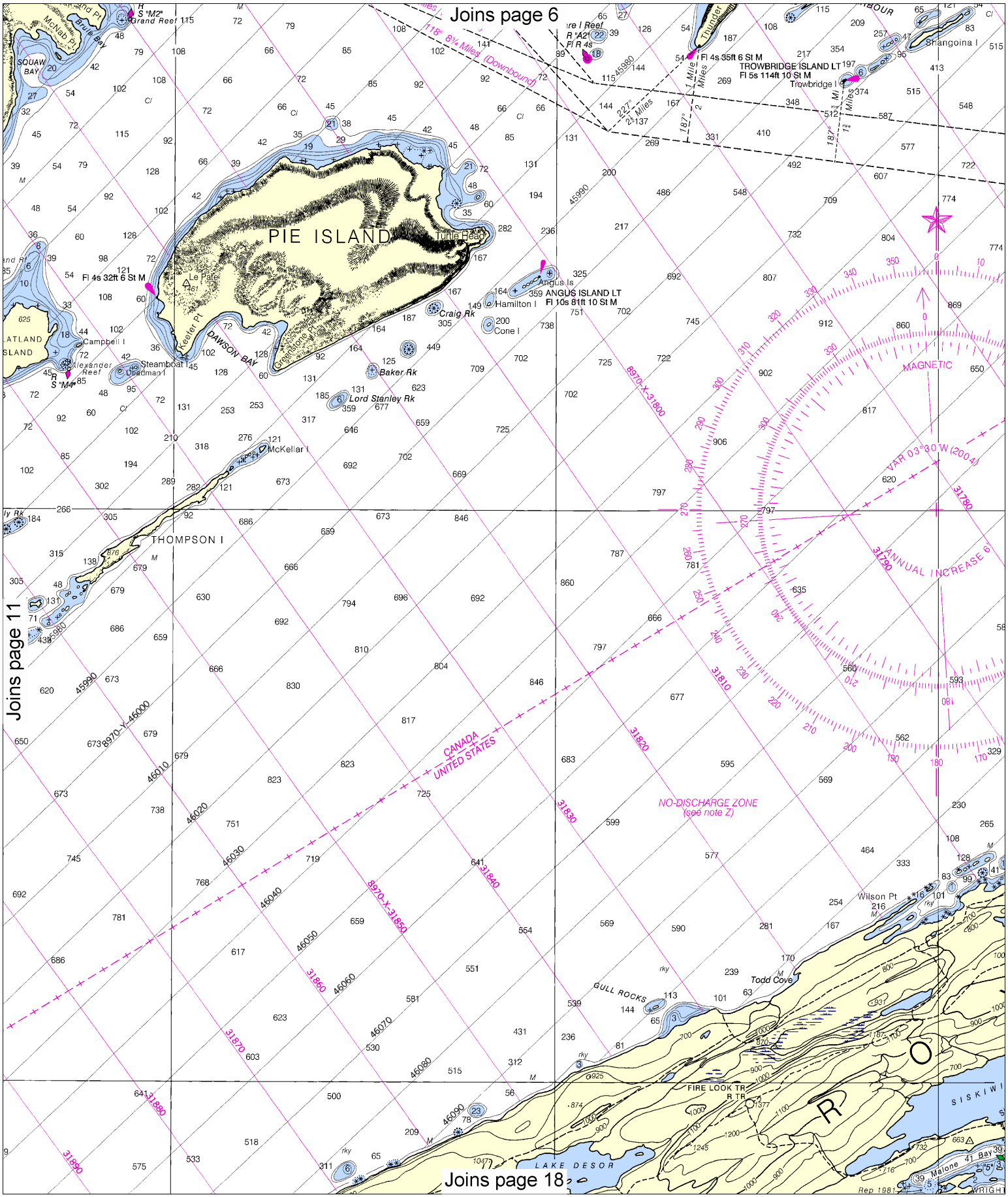
YARDS: 5000 2500 0 5000 10000 15000

STATUTE MILES: 0 1 2 3 4 5 6 7 8 9 10 11 12 13

Note: Chart grid lines are aligned with true north.



Joins page 5
Joins page 12
Joins page 17
PIE ISLAND
Turtle Head
Le Pate
Keefer Pt
DAWSON BAY
Greenstone Pt
Fl 4s 32ft 6 St M
FLATLAND ISLAND
FLATLAND HARBOUR
Flatland Rf
Birch I
Campbell I
Alexander Reef
R S "M4"
Steamboat I
Deadman I
Dog I
Russell Pt
Wyllie Pt
STURGEON B
Zealand Spit
Sturgeon Pt
SQUAW BAY
McNab Pt
Brule Bay
Lomond River
R S "M2"
Grand Reef
Hare I Reef
R "A2"
Fl R 4s
Fl 4s 35ft 6 St M
TROWBRIDGE ISLA
Fl 5s 114ft 10 St M
Thunder
118° 8¾ Miles (Downbound)
Miles (Upbound)
Angus Is
ANGUS ISLAND LT
Fl 10s 81ft 10 St M
Hamilton I
Craig Rk
Cone I
Baker Rk
Lord Stanley Rk
McKellar I
THOMPSON I
Sly Rk
Sister Is
MINK BAY
MINK I
Mink Pt
Fl 4s 30ft 6 St M
Slipper I
SPAR
SPAR CHANNEL
Fl 4s 40ft 6 St M
JARVIS I
Devil I
VICTORIA I
CANADA
UNITED STATES
NO-DISCHARGE ZONE
(see note Z)
GULL ROCKS
Todd Cove
FIRE LOOK TR
R TR
LAKE DESOR



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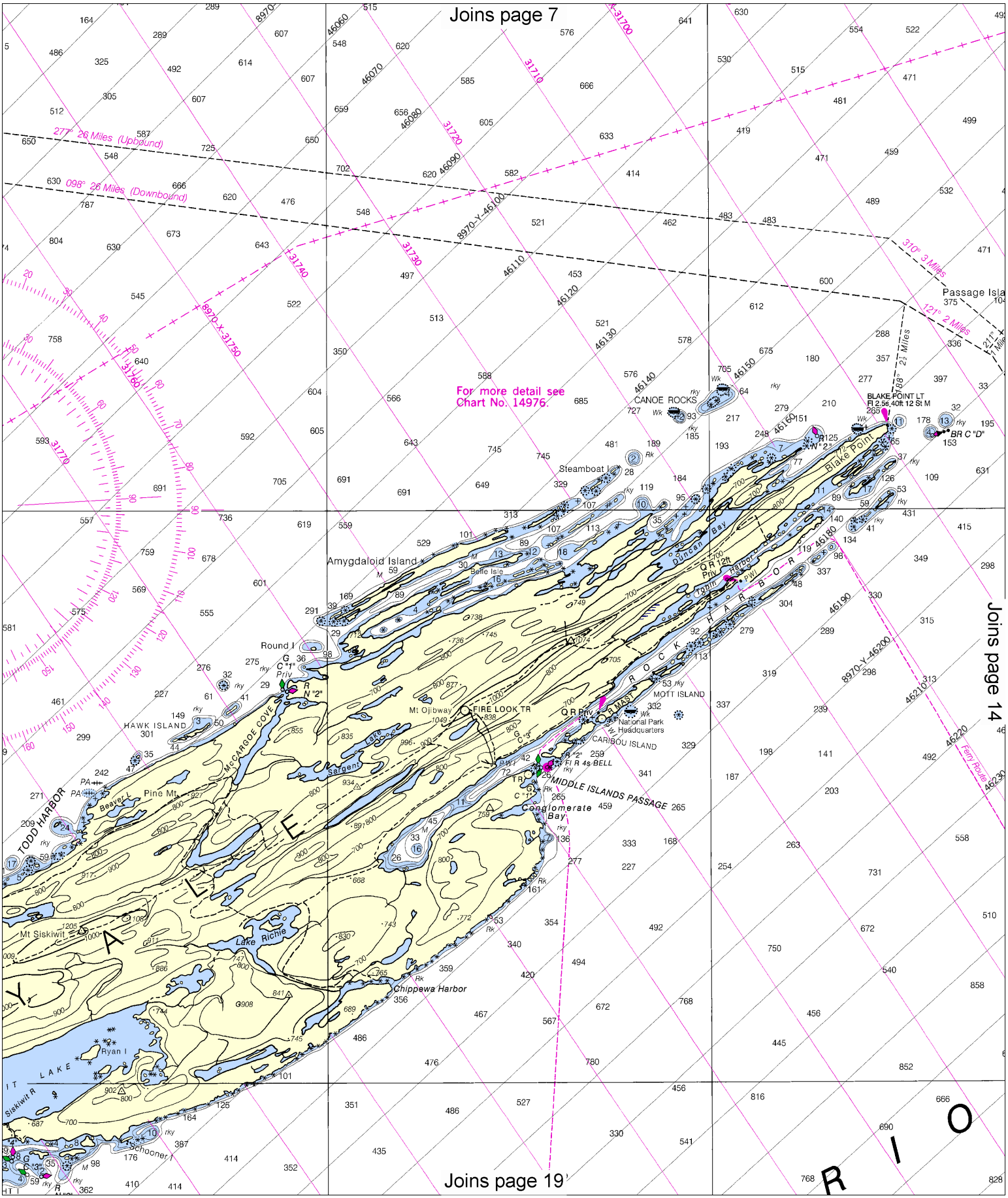
Note: Chart grid lines are aligned with true north.

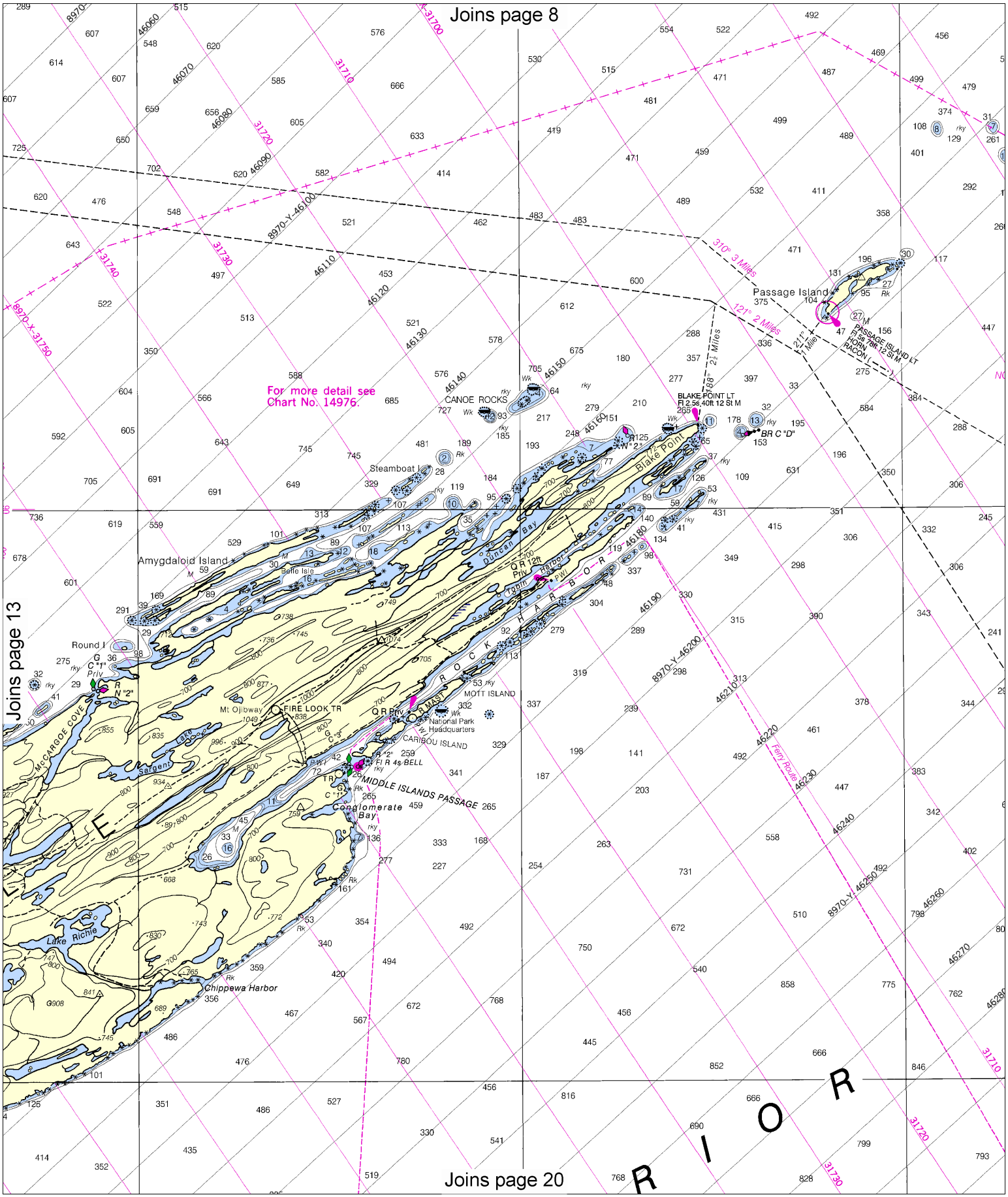
Printed at reduced scale.

See Note on page 5.

YARDS 5000 2500 0 5000 10000 15000

STATUTE MILES 0 1 2 3 4 5 6 7 8 9 10 11 12 13


Joins page 7
For more detail see Chart No. 14976.
277° 26 Miles (Upbound)
098° 26 Miles (Downbound)
8970-Y-46100
8970-X-31750
8970-Y-46200
310° 3 Miles
121° 2 Miles
211° 1 Mile
188° 2½ Miles
CANOE ROCKS
BLAKE POINT LT
Fl 2.5s 40ft 12 St M
Blake Point
Passage Isla
Steamboat I
Amygdaloid Island
Belle Isle
Duncan Bay
Harbor
Round I
HAWK ISLAND
McCARGOE COVE
Mt Ojibway
FIRE LOOK TR
MOTT ISLAND
National Park Headquarters
CARIBOU ISLAND
Fl R 4s BELL
MIDDLE ISLANDS PASSAGE
Conglomerate Bay
TODD HARBOR
Beaver L
Pine Mt
Sargent L
Mt Siskiwit
Lake Richie
Chippewa Harbor
Ryan I
LAKE SUPERIOR
Siskiwit R
Schooner I
Ferry Route
Joins page 14
Joins page 19



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Printed at reduced scale.

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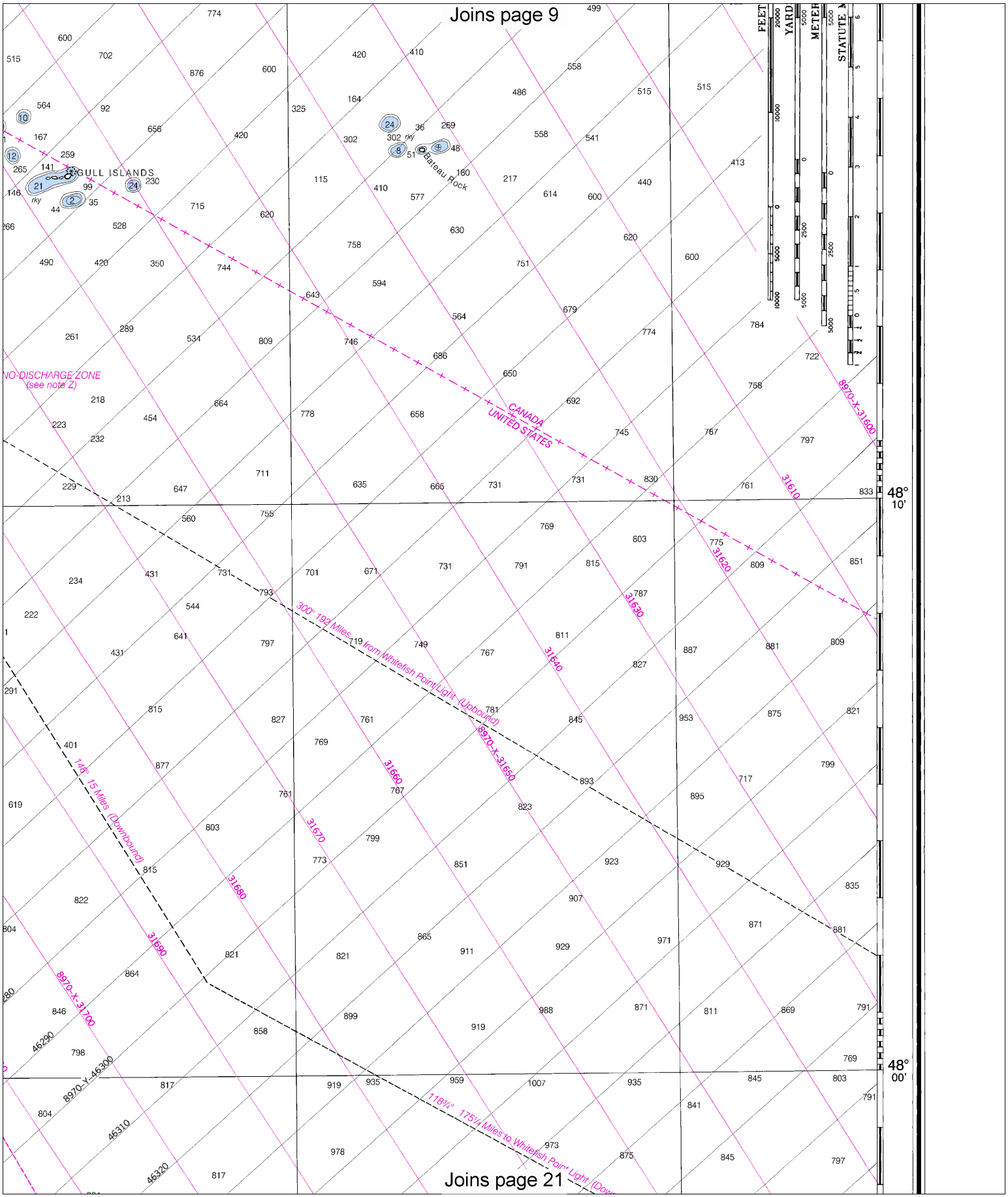
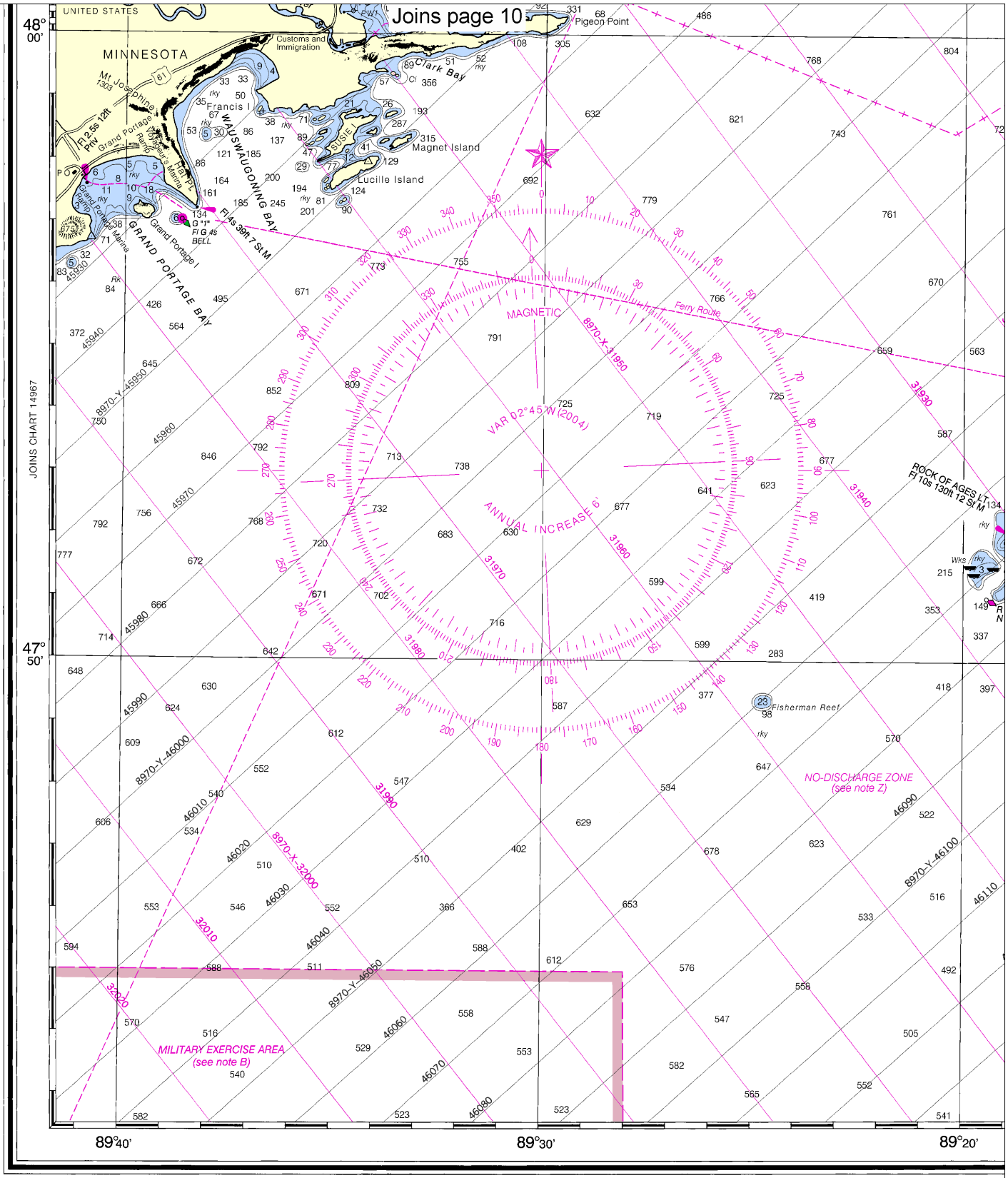
STATUTE MILES 1 2 3 4 5 6 7 8 9 10 11 12 13

See Note on page 5.


Joins page 9
GULL ISLANDS
Bateau Rock
CANADA
UNITED STATES
NO DISCHARGE ZONE
(see note Z)
8970-X-31600
31610
31620
31630
31640
8970-X-31650
31660
31670
31680
31690
8970-X-31700
8970-Y-46300
300° 19¼ Miles from Whitefish Point Light (Upbound)
148° 15 Miles (Downbound)
118½° 175¼ Miles to Whitefish Point Light (Down
48° 10'
48° 00'
FEET
YARDS
METERS
STATUTE MILES
Joins page 21



28th Ed., Sep. / 04 ■ Corrected through NM Sep. 25/04
Corrected through LNM Sep. 14/04

14968

LORAN-C OVERPRINTED

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe na
Ocean Service encourages users to submit corrections, addit
improving this chart to the Chief, Marine Chart Division (N/
Service, NOAA, Silver Spring, Maryland 20910-3282.

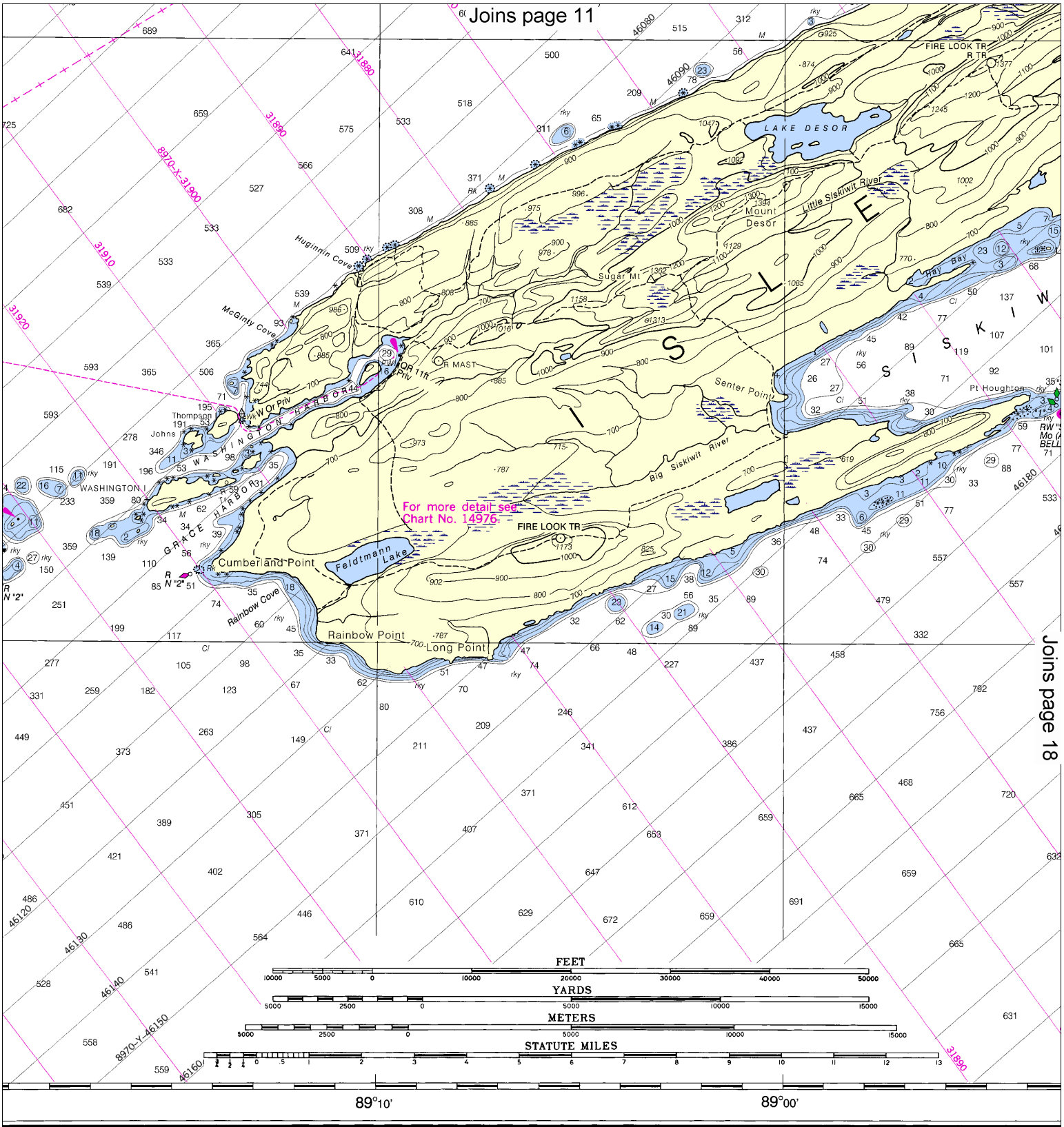
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

See Note on page 5.

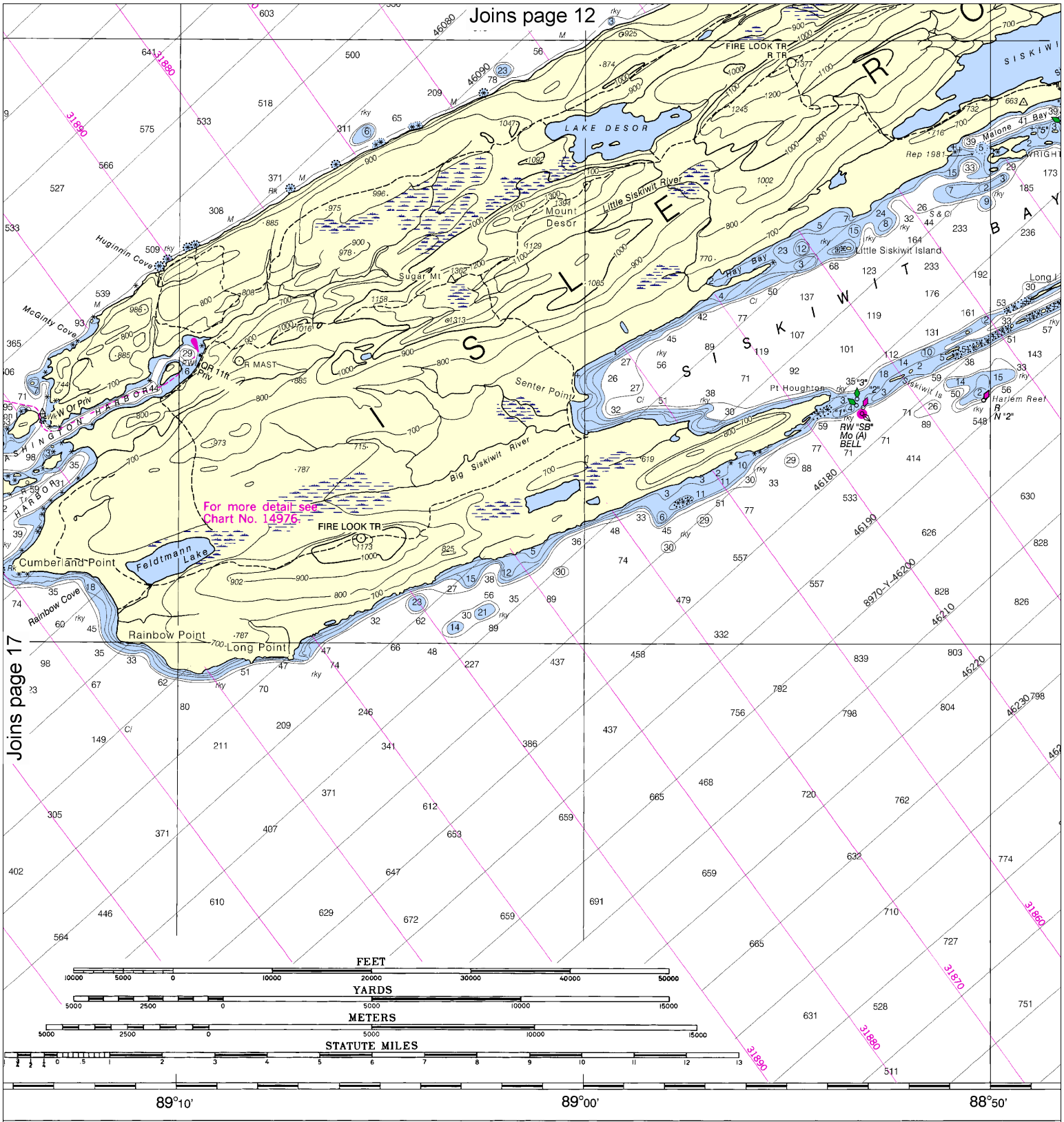
YARDS 5000 2500 0 5000 10000 15000

STATUTE MILES 1 2 3 4 5 6 7 8 9 10 11 12 13



navigation. The National
ditions, or comments for
N/CS2), National Ocean

SOUNDINGS IN FEET



OUNDINGS IN FEET

Published at Wa
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NATIONAL OCEANIC AND ATM
NATIONAL OC
COAST S

Note: Chart grid lines are aligned with true north.

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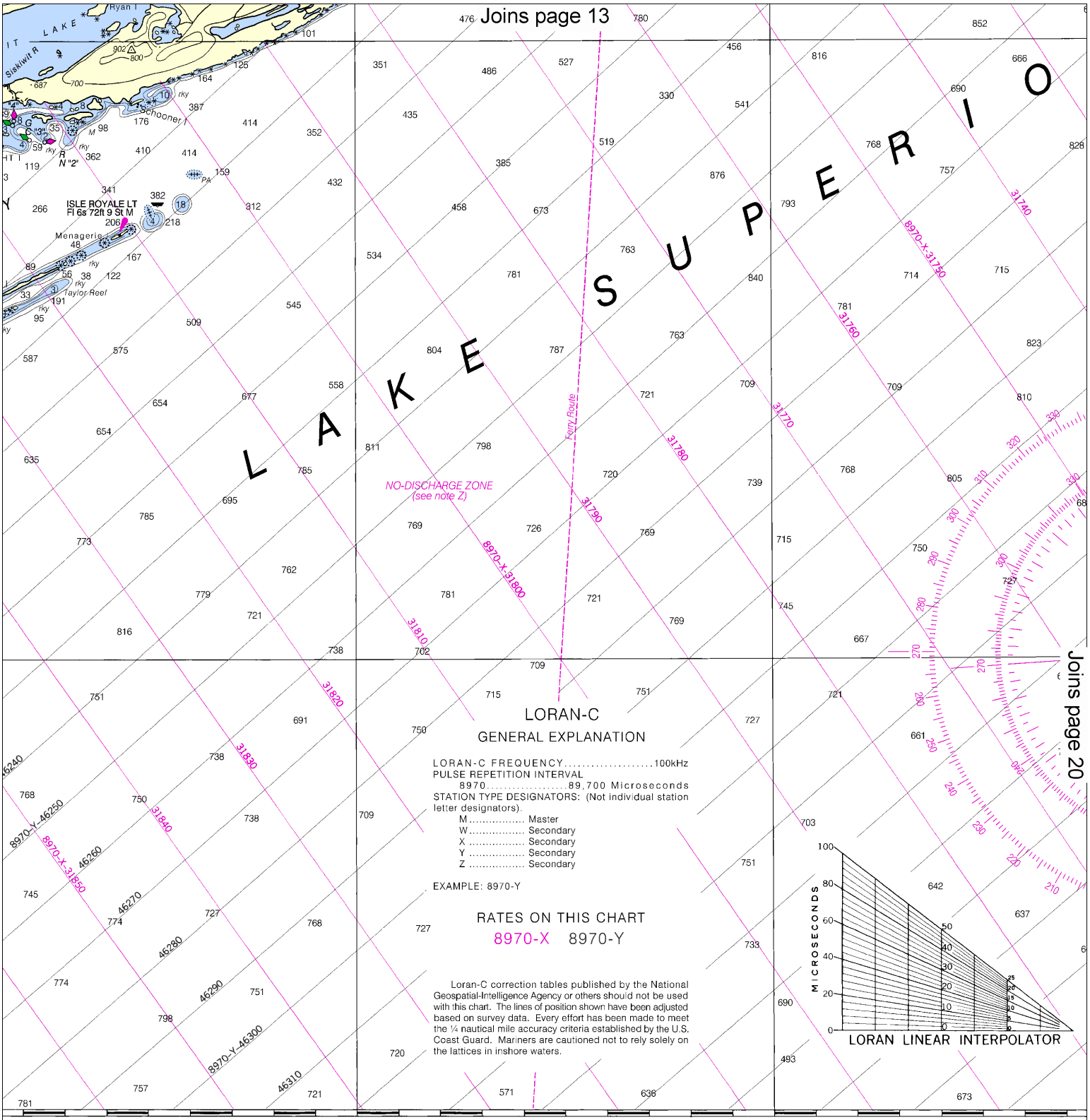
See Note on page 5.



Washington, D.C.
NT OF COMMERCE
TMOSPHERIC ADMINISTRATION
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NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

Joins page 14

Joins page 19

LAKE SUPERIOR

NO-DISCHARGE ZONE
(see note Z)

Ferry Route

MAGNETIC

VAR 04°00'W (2004)

ANNUAL INCREASE 6'

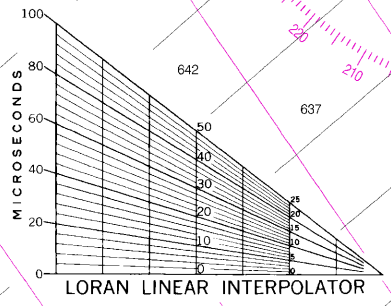
LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
8970.....89,700 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 8970-Y

RATES ON THIS CHART
8970-X 8970-Y

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.



88°40' JOINS CHART 14964 88°30' 88°20'

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FATHOMS
FEET
METERS

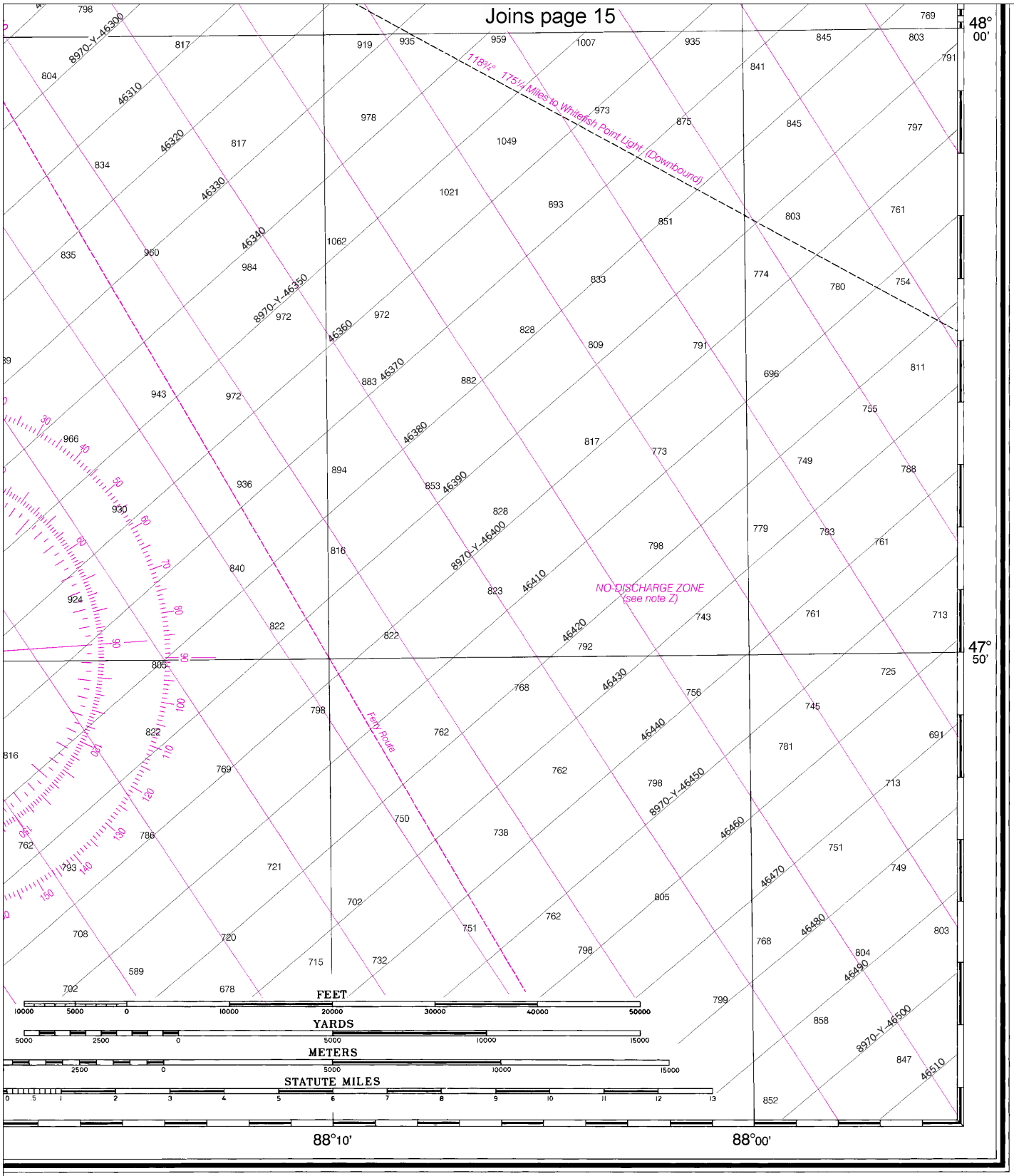
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

YARDS 5000 2500 0 5000 10000 15000

STATUTE MILES 0 1 2 3 4 5 6 7 8 9 10 11 12 13

See Note on page 5.



Grand Portage Bay to Shesheeb Point

SOUNDINGS IN FEET - SCALE 1:120,000

14968

LORAN-C OVERPRINTED

ED NO 28

NSN 7642014010604 NGA REFERENCE NO. 14XCO14968

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

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Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
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Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
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National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
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Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

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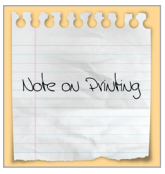

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NOAA's Office of Coast Survey The Nation's Chartmaker